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Valvular Heart Disease

PREDICTORS FOR ADVERSE OUTCOMES AFTER TRICUSPID VALVE SURGERY

Poster Contributions
Poster Hall B1
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Session Title: Insight into Mitral and Tricuspid Valve Dysfunction
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Background: Surgical risk prediction models (STS and EuroScore II) predict the risk of operative mortality and morbidity after adult cardiac surgery but, unfortunately, these models do not include tricuspid valve (TV) surgery. We hypothesized that predictors for adverse outcome after TV surgery are unique and different from the established risk models.

Methods: We identified all patients who underwent TV surgery between 2004 and 2012 at our institution. Adverse outcome was defined as death during surgery or hospital stay, or duration of admission ≥4 weeks.

Results: Among 348 patients who underwent TV surgery, 68 patients (19.5%) had an adverse outcome. 30-day mortality was 9.7% including 2 patients who died in the operating room and 34 patients who died during the post-operative period. On univariate logistic regression, we identified 14 predictors that were significantly associated with adverse outcome (Figure). On multivariate binary logistic regression, history of heart failure (HF) or left ventricle ejection fraction (LVEF) <45%, history of coronary artery bypass grafting or valve surgery, critical coronary artery disease on angiography and hepatomegaly were significantly associated with adverse outcome.

Conclusion: Predictors for adverse outcome after TV surgery are similar to STS risk models and Euroscore II except for the presence of hepatomegaly which signifies long standing congestion due to right sided HF. Future studies may be required to validate our results in other cohorts.